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<b>Subject:</b>  SERVICE CAUTION FOR TPMS	<b>Bulletin No:</b> 02-003/11
	<b>Last Issued:</b> 06/23/2011

## BULLETIN NOTE

- This bulletin supersedes the previous bulletins 02-004/06 issued 04/21/06 and 06/09/06, 02-007/09 issued 07/06/09, and 02-004/10 issued 03/24/10. The APPLICABLE MODEL(S)/VINS has been revised.
- Changes are noted below in Red beside the change bar.

## APPLICABLE MODEL(S)/VINS

2006-2011 MX-5	2007-2011 CX-9	2004-2011 Mazdaspeed3	2008-2011 Mazda6
2004-2011 RX-8	2004-2011 Mazda3	2006-2010 Mazda5	
2007-2011 CX-7	2011 Mazda2	2012 Mazda5	

## DESCRIPTION

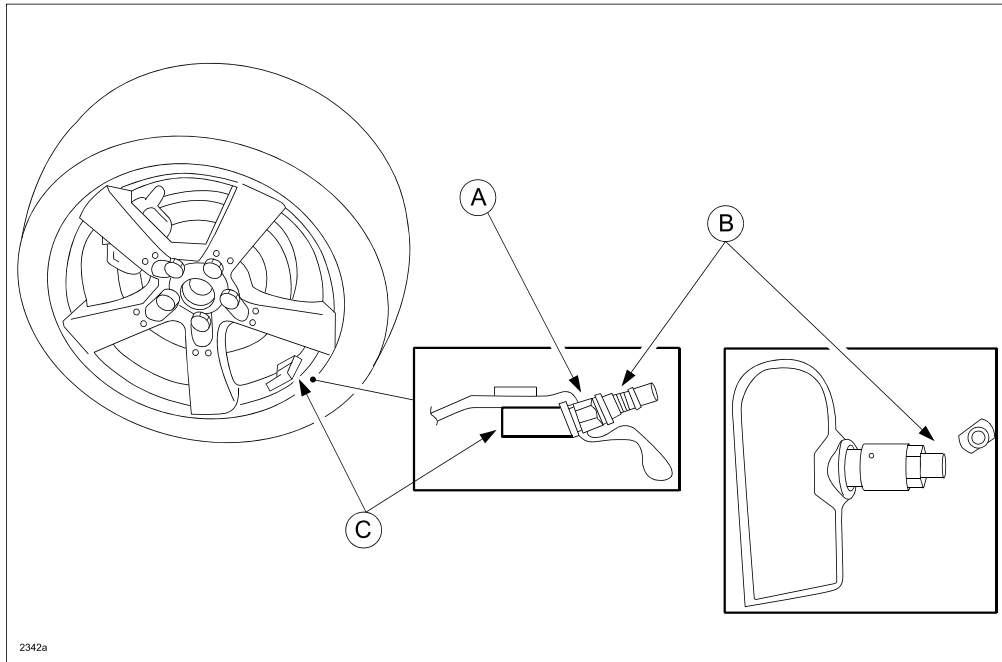
It is important to follow the proper procedure for vehicles equipped with TPMS (Tire Pressure Monitoring System). Failure to do so may result in damage/breakage of the TPMS sensor and/or a decrease in pressure due to corrosion of the TPMS valve.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

1. DO NOT use metal stem caps:

Some vehicles may experience the aluminum valve stem (B) breaking off of the TPMS wheel unit (C) when removing aftermarket valve stem caps during procedures such as routine checking of air pressure in tires.

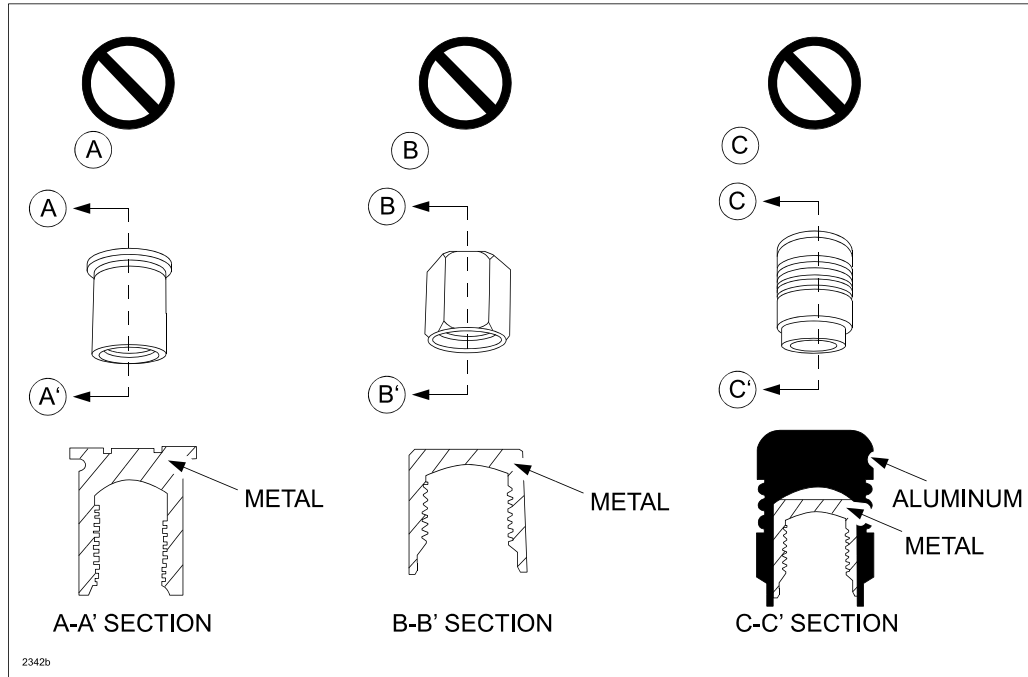
- TPMS sensor nut (A): Initial torque 67-75 in-lbf (7.5-8.5 Nm)



Some aftermarket valve stem caps are made of metal or have thread inserts that are made of metal. Examples of these types of aftermarket valve stem caps are shown below. When metal and aluminum are together in such a condition, galvanic corrosion occurs between the aluminum valve stem of the TPMS sensor unit and the metal threads of the valve stem cap. This corrosion can cause them to fuse together, becoming difficult to remove by hand. When more force is used to remove the valve stem cap, the aluminum valve stem of the TPMS sensor unit will break off and the TPMS sensor unit will need to be replaced.

TYPICAL AFTERMARKET VALVE STEM CAPS

- (A) - Metal
- (B) - Chrome over metal
- (C) - Aluminum with metal insert

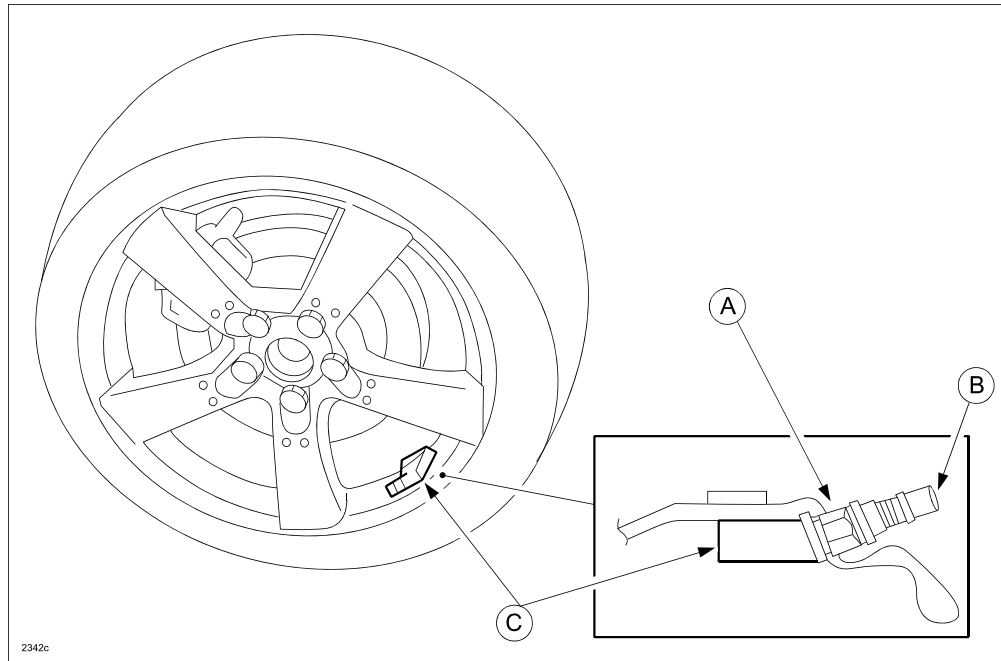


This service bulletin can aid in informing customers of the damage that may be caused to the TPMS sensor units by installing these types of valve stem caps. Advise customers to use aluminum or plastic caps ONLY. Also, ensure that the caps they choose to install DO NOT have a metal thread insert.

**NOTE:** Damage to TPMS sensor units by installing aftermarket valve stem caps made of metal or with metal inserts is not covered by Mazda Warranty and claims where the sensor is found damaged in this manner will be denied or debited to the repairing dealer.

2. Torque TPMS sensor nut (A) and valve core (B) properly:  
Excessive torque on TPMS sensor nut and/or valve core may result in damage/breakage of the valve stem.

**NOTE:** The torque of the TPMS sensor nut slightly decreases after filling the tire with air. 17.7-26.6 in-lbf (2-3 Nm) is acceptable at this stage. DO NOT retighten after that.



3. Replace TPMS sensor nut when TPMS sensor (C) is detached:  
The TPMS sensor nut must be replaced with seal washer and seal when TPMS sensor is detached from the wheel.

- 1) TPMS sensor nut
- 2) TPMS sensor components
- 3) Seal washer
- 4) Seal
- 5) TPMS sensor

